

1 **WO**

2
3
4
5
6 **IN THE UNITED STATES DISTRICT COURT**
7 **FOR THE DISTRICT OF ARIZONA**
8

9 Lighting Defense Group LLC,

10 Plaintiff,

11 v.

12 Shanghai Sansi Electronic Engineering
13 Company Limited,

14 Defendant.

No. CV-22-01476-PHX-SMB

ORDER

15 Pending before the Court are Plaintiffs’ and Defendants’ opening claim construction
16 briefs and responses (Docs. 43, 45, 46 & 49). On December 1, 2023, the Court conducted
17 a Markman Hearing (the “Hearing”) in this matter, pursuant to *Markman v. Westview*
18 *Instruments, Inc.* (“Markman II”), 517 U.S. 370 (1996). Consistent with the *Markman*
19 requirements, the Court will construe the disputed claims in the following patents at issue:
20 U.S. Patent Nos, 7,874,700 (“the ’700 patent”), 8,256,923 (“the ’923 patent”), 8,939,608
21 (“the ’608 patent”), and 9,163,807 (“the ’807 patent”) (collectively, the “Asserted
22 Patents”).

23 **I. BACKGROUND**

24 This claim construction determination arises out of a patent dispute between
25 Lighting Defense Group (“LDG”) and Shanghai Sansi Electronic Engineering Co., LTD
26 (“Sansi”). (Doc 1 at 2.) LDG owns 40 U.S. patents, including those at issue here. (*Id.*
27 ¶¶ 1–5.) In June 2020, LDG contacted Sansi about their alleged patent infringement on
28 three patents, notifying them that they need a license to continue “making, using, selling,

1 importing or otherwise offering certain LED products.” (*Id.* ¶ 7.) In August 2020 Sansi
 2 responded contending that they did not infringe on the patents, and that a license would be
 3 unnecessary. (*Id.* at 3 ¶ 9.) After Sansi’s failure to enter into licensing discussions, LDG
 4 filed a complaint in district court for declaratory judgment attempting to have Sansi’s
 5 products delisted from Amazon. (*Id.* at 5 ¶¶ 17–19.) After a “tentative ruling” dismissing
 6 this complaint, LDG voluntarily dismissed the action. (*Id.* ¶ 19.) LDG then refiled
 7 “seeking redress” against Sansi for infringement of three patents. (*Id.* ¶ 21.) As part of
 8 this infringement claim the parties filed claim construction briefs asking the court to
 9 construe certain terminology in the patents’ claims. (Docs. 43, 45, 46 & 49). These briefs
 10 are before the Court here.

11 **II. LEGAL STANDARD**

12 There are two steps in an infringement analysis. “The first step is to determine the
 13 meaning and scope of the patent claims asserted to be infringed. The second step is to
 14 compare the properly construed claims to the device accused of infringing.” *Markman v.*
 15 *Westview Instruments, Inc.*, 52 F.3d 967, 976 (9th Cir. 1995), *aff’d* 517 U.S. 370 (1996).
 16 The first issue—known as claim construction or interpretation—is now fully joined before
 17 the court after substantial briefing and oral argument by the parties. “[T]he construction
 18 of a patent, including terms of art within its claim, is exclusively within the province of the
 19 court.” *Markman II*, 517 U.S. at 372. Claim construction is “the process of giving proper
 20 meaning to the claim language,” the fundamental process that defines the scope of the
 21 protected invention. *Abtox, Inc. v. Exitron Corp.*, 122 F.3d 1019, 1023 (Fed. Cir. 1997).

22 “It is well-settled that, in interpreting an asserted claim, the court should look first
 23 to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the
 24 specification and, if in evidence, the prosecution history.” *Vitronics Corp. v. Conceptronic,*
 25 *Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “First, we look to the words of the claims
 26 themselves, both asserted and nonasserted, to define the scope of the patented invention.”
 27 *Id.* Second, we should look at the specification to determine if a term has been given a
 28 special definition. *Id.* “Third, the court may also consider the prosecution history of the

1 patent, if in evidence.” *Id.* Ordinarily, “intrinsic evidence alone will resolve any ambiguity
2 in a disputed claim” therefore extrinsic evidence should not be relied upon. *Id.* at 1583.

3 Courts, however, may consider extrinsic evidence for education purposes and to
4 “help the court determine what a person of ordinary skill in the art would understand claim
5 terms to mean”. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1319 (Fed. Cir. 2005). But the
6 Court must discount any expert testimony “that is clearly at odds with the claim
7 construction mandated by the claims themselves, the written description, and the
8 prosecution history, in other words, with the written record of the patent.” *Id.* at 1318
9 (internal quotations omitted).

10 There may be claims of indefiniteness in claim construction arguments. The Patent
11 Act requires a patent specification to “conclude with one or more claims particularly
12 pointing out and distinctly claiming the subject matter which the inventor . . . regards as
13 the invention.” 35 U.S.C. § 112. A patent must “be precise enough to afford clear notice
14 of what is claimed, thereby apprising the public of what is still open to them.” *Nautilus,*
15 *Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014) (cleaned up). Thus, “a patent is
16 invalid for indefiniteness if its claims, read in light of the specification delineating the
17 patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled
18 in the art about the scope of the invention.” *Id.* at 901. The burden is on the patent
19 challenger to prove indefiniteness by clear and convincing evidence. *Extremity Med., LLC*
20 *v. Fusion Orthopedics, LLC*, No. CV-22-00723-PHX-GMS, 2023 WL 4408270, at *9 (D.
21 Ariz. July 7, 2023).

22 **III. DISCUSSION**

23 There are thirteen terms and/or phrases in dispute. The Court will walk through
24 each of these terms, one subsection at a time, going in order of how they were presented.
25 For clarity, each subsection begins with a side-by-side chart presenting each side’s position
26 on how the disputed term should be defined.

27 **A. Light Fixture**

28 Sansi Construction	LDG Construction
-----------------------	------------------

Limiting	Not limiting
<p>“a downward-facing lighting unit which includes one or more light emitting elements, one or more sockets, connectors, or surfaces configured to position and connect the light emitting elements to a power supply, an optical device configured to distribute light from the light emitting elements, and mechanical components for supporting or suspending the fixture. A light bulb or LED is a light emitting element, not a light fixture.”</p>	<p>“a system for producing, controlling, and/or distributing light for illumination.”</p>

(Doc. 61-1 at 2.)

The parties dispute several things regarding the term “light fixture.” First, the parties dispute whether the term, as used in the preamble, is limiting. “Whether to treat a preamble as a limitation is ‘determined on the facts of each case in light of the overall form of the claim, and the invention as described in the specification and illuminated in the prosecution history.’” *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1357 (Fed. Cir. 2012) (quoting *Applied Materials, Inc. v. Adv. Semiconductor Materials Am., Inc.*, 98 F.3d 1563, 1572–73 (Fed. Cir. 1996)). The preamble may also be limiting when it is “essential to understand limitations or terms in the claim body,” terms in the body of the claim “depend[] on a particular disputed preamble phrase for antecedent basis,” or there was “clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art.” *Georgetown R. Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017) (quoting *Catalina Mktg. Intl., Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 809 (Fed. Cir. 2002)).

Here, the preamble in claims 1, 16, and 22 of the ’700 patent reads “A light fixture, comprising.” (Doc. 43-2 at 13.) Sansi argues that the preamble is necessary to understand

1 the claims because the body of the claims contain vague structural definitions. (Doc. 43 at
2 10.) They further argue that without the limitation of “light fixture,” one reading the claim
3 cannot understand what it is. (*Id.*) LDG disagrees and argues that the claims do define a
4 structurally complete invention and “light fixture” is merely an intended use. (Doc. 45 at
5 11.) The Court agrees with Sansi. The specification repeatedly uses the term “light fixture”
6 to discuss what the invention is. Thus, the preamble language is necessary to give meaning
7 to the claims.

8 Because the Court finds the preamble to be limiting, the Court will construe the
9 term. First, Sansi proposes adding two limitations to the construction for which the Court
10 finds no support. The limitations are “downward-facing” and “a light bulb or LED is a
11 light emitting element, not a light fixture.” (Doc. 43-3 at 11.) However, after reviewing
12 the claim language, the Court finds nothing requiring the light fixture to have a downward-
13 facing orientation for the light fixture. Similarly, there is nothing in the claim language,
14 the specification, or the prosecution history that informs any express disclaimer or
15 definition excluding a light bulb. *See Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314,
16 1327–28 (Fed. Cir. 2003) (explaining that there must be support in the specification or the
17 prosecution history for a negative limitation); *Vehicle IP, LLC v. AT&T Mobility, LLC*, 594
18 F. App’x 636, 642 (Fed. Cir. 2014) (holding that an express disclaimer or independent
19 lexicography was needed to justify a negative limitation).

20 Second, Sansi argues that the specification defines light fixture as one or more light
21 emitting elements, one or more sockets, connectors, or surfaces configured to position and
22 connect the light emitting elements to a power supply, an optical device configured to
23 distribute light from the light emitting elements, and mechanical components for
24 supporting or suspending the fixture. However, this is inaccurate. This language is used
25 to describe “a typical luminaire” but *not* this specific invention. Alternatively, LDG’s
26 proposed construction stems from the specification, stating, “a luminaire is a system for
27 producing, controlling, and/or distributing light for illumination.” The specification then
28 offers examples of light fixtures including Sansi’s proposed definition. Additionally, the

specification language discusses the distribution of light throughout, which further supports LDG's construction. Because it is best supported by the specification, the Court adopts LDG's proposed construction.

B. Top/Bottom

Sansi Construction	LDG Construction
<p>The requirement of "second," "bottom" or "distal" end/aperture requires a fixture installed and facing downward way from its mounting point; the "top" or "first" end/aperture requires the same fixture installation facing downward to orient the "top" or "first" end relative to the "second," "bottom" or "distal" end.</p> <p>Alternatively, indefinite.</p>	<p>Not indefinite.</p> <p>Plain and Ordinary meaning: "top" refers to proximity to the mounting member. "First" or "second" can be any two. "Bottom" and "distal" are spaced apart from "top" or "first"</p> <p>To the extent these terms are construed, the terms must be construed in pairs as they appear in the claims as they relate to each in those pairs:</p> <p>first end: an end of the member.</p> <p>second end: an end of the member that is a different end of the member than the first end.</p> <p>first aperture: an opening in the member.</p> <p>second aperture: an opening in the member that is a different opening in the member than the first aperture.</p> <p>top end: the end of the member that is near or proximate to a mounting member or element.</p> <p>second end: an end of the member that is a different end of the member than the top</p>

end.

top end: the end of the member that is near or proximate to a mounting member or element.

Bottom end: an end of the member that is a different end of the member than the top end and that is spaced apart from the top end.

first aperture: an opening in the member.

second distal aperture: an opening in the member that is a different opening in the member than the first aperture and that is spaced apart from the first aperture.

(Doc. 61-1 at 5.)

Sansi argues that if the light fixture is not construed to require a downward-facing orientation, then all of these terms are indefinite. A patent claim is indefinite and therefore invalid if, when “read in light of the specification delineating the patent, and the prosecution history, [the claim] fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus*, 572 U.S. 898 at 901. Sansi has the burden of proving indefiniteness by clear and convincing evidence. *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1365 (Fed. Cir. 2017). Alternatively, LDG argues that top and bottom are easily understood terms therefore need no construction. The Court agrees.

Claim 1 of the ’700 patent reads that a light fixture has a member that comprises: “a first end comprising a first aperture,” “a second end comprising a second aperture,” and “a channel extending from the first aperture to the second aperture,” where “air passes through the channel to transfer heat from the member.” (Doc. 33-2 at 14.) Claim 16 of the ’700 patent reads a light fixture has a member that comprises “a first aperture disposed along a

top end,” “a second aperture disposed along a second end,” and “a channel extending from the first aperture to the second aperture.” (*Id.*) And Claim 22 of the ’700 patent says “a first aperture disposed along a top end,” “a second aperture disposed along a second end,” and “a first channel extending from the first aperture to the second aperture.” (*Id.*)

The Court has already concluded that a downward-facing orientation is not a required part of the patent. In light of that, and after reading the claim language above, the Court agrees with LDG that “Top” and “Bottom” do not need to be defined here. *See Infection Prevention Techs., LLC v. Lumalier Corp.*, No. 10-12371, 2012 WL 3248232, at *20 (E.D. Mich. Aug. 8, 2012) (rejecting an attempt to add “vertically” and “horizontally” to construction of the terms “above” and “around” because their ordinary meaning was “obvious, even to a lay person.”). As the Court explains throughout this order, it will not attempt to define terms where the plain and ordinary language is sufficient for the trier of fact and will not add ambiguity where none exists—which is what Sansi’s attempted construction attempts to do.

Additionally, Sansi fails to show that without construction a trier of fact would be unable to, without “reasonable certainty,” understand “the scope of the invention” as required by the appropriate legal standard. *Nautilus*, 572 U.S. at 901. Therefore, the Court will not construe the claim or terms here.

C. Wherein clauses

Sansi Construction	LDG Construction
Requires the fixture to be installed and operating to be met, and the ability to uniquely identify that heat is dissipating from the member to the interior of the channel through the specified aperture in all use cases.	Not indefinite. Plain and Ordinary meaning: the channel needs to be “configured” such that heat or air flows as claimed.
Alternatively, indefinite,	To the extent these terms are construed, each term is different and should be separately construed: wherein the channel transfers at least a

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

portion of heat generated by the light emitting diode through the first aperture: the channel is configured for at least a portion of the heat generated by the LED to be transferred to moving air in the channel that exits the channel through the first aperture.

wherein air enters the channel and transfers at least a portion of the heat generated by the first and second LEDs through the first aperture: the channel is configured for at least a portion of the heat generated by the first and second LEDs to be transferred to moving air in the channel that exits the channel through the first aperture.

wherein air enters the channel through the second aperture and exits the channel through the first aperture: the channel is configured for air to enter through the second aperture and exit through the first aperture.

wherein air passes through the channel from the second aperture to the first aperture and transfers at least a portion

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

of heat generated by the first LED and the second LED through the first aperture: the channel is configured for air to enter through the second aperture and exit through the first aperture and for at least a portion of the heat generated by the first LED and the second LED to be transferred to the moving air and exit the channel through the first aperture.

wherein air enters the channel through the second aperture and exits the channel through the first aperture: the channel is configured for air to enter through the second aperture and exit through the first aperture.

wherein air passes through the channel from the second aperture to the first aperture and transfers at least a portion of the heat generated by the first LED and the second LED through the first aperture: the channel is configured for air to enter through the second aperture and exit through the first aperture and for at least a portion of the heat generated by the first LED and second LED to be transferred to moving air and exit the channel through

	the first aperture.
--	---------------------

(Doc. 61-1 at 11–12.)

Sansi has three disputes about the wherein clauses. The parties first dispute when a light fixture can be an infringing fixture. Sansi argues that it can only be an infringing fixture when it is operating—so air and heat can move as required by the claim. (Doc. 43 at 19.) Second, the parties dispute how infringement must be shown. Sansi argues infringement may only be proven by showing how the heat and air move. (*Id.*) Finally, Sansi argues that if the Court does not adopt their construction, then the terms are indefinite. (Doc. 43 at 20.)

LDG responds to Sansi’s first argument by stating that their claims are apparatus, not method, claims. (Doc. 45 at 20.) “[A]pparatus claims cover what a device *is*, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990); *see also INVT SPE LLC v. Int’l Trade Comm’n*, 46 F.4th 1361, 1371 (Fed. Cir. 2022) (“Whether infringement requires actual performance of the recited functions by the accused device depends on the claim language.”). To emphasize this distinction, LDG points to the Federal Circuit’s ruling in *Alere, Inc. v. Rembrandt Diagnostics, LP*, 791 F. App’x 173 (Fed. Cir. 2019). There, the court analyzed a similar wherein clause and found that rather than inform the court of how the device operates, a clause of this type “includes functional language that informs us of the structural requirements of the claim.” *Id.* at 177.¹ Sansi instead relies on a decision in *Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d 984 (Fed. Cir. 2009). In *Ball Aerosol*, the Federal Circuit was evaluating a district court’s finding of infringement, not construction. *Id.* at 988.

¹ The similar language reads as follows: “wherein the flow control channel *is disposed* inside the sample fluid container with the liquid pervious side oriented toward the base of the sample fluid container so that *the assay sample fluid, when added to the container, is delivered to the sample loading zone of the assay test strip by entry through a liquid pervious side of the flow control channel* without migration through an intermediate structure” *Alere*, 791 F. App’x at 176–77.

Therefore, the case is not persuasive, as we are in the construction stage. Given this, the Court agrees with LDG that these are apparatus claims, and it will construe them as such.

In addition to noting that these are apparatus claims, LDG also notes that Sansi's construction arguments go beyond the scope of what a court should do in a construction order. (Doc. 45 at 21.) Instead of offering a definition of how to interpret these claims, Sansi's approach—i.e., including phrases such as “operating to infringe” and “prove infringement” in their arguments—indeed appears to be based on an infringement analysis which is not before this Court here. *See Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1324 (Fed. Cir. 2009) (“Claims are properly construed without the objective of capturing or excluding the accused device.”); *Warner Mfg. Co. v. Armstrong*, 504 F. Supp. 2d 589, 591 (D. Minn. 2007) (“Noninfringement is never relevant to claim construction.”).

Finally, Sansi's proposed construction also adds terms into the claims which, as the Court has explained throughout this order, is not how a Court should properly construe a claim. Here, Sansi asks the Court to add substantive modifiers to the claim, including “uniquely identify” and “in all cases.” As LDG notes, these both hamstring the claims *and* add extra ambiguity—thereby defeating the purpose of a *Markman* hearing. (Doc. 45 at 22.)

Because LDG's proposed construction avoids ambiguity, is not indefinite, and stays in the scope of claim construction, the Court will use its construction.

D. “[at least] a portion of the second member being disposed above the LEDs”

Sansi Construction	LDG Construction
Indefinite	Not indefinite At least a portion of the second member extends beyond the location of any LED on the first member in a direct from the bottom end to the top end.

(Doc. 61-1 at 9.)

This language is found in the '608 patent. (Doc. 43-2 at 34–38.) Sansi argues that

if the claims are not construed to require the light fixture be positioned in a downward facing orientation, then this claim is indefinite and therefore must be construed by the Court. (Doc. 43 at 20.) Alternatively, LDG again argues that this claim contains plain English that needs no judicial construction. (*Id.* at 23.) They specifically argue that the word “above” has a well understood meaning of “a higher place or over.” (*Id.*) The Court agrees. Although Sansi attempts to re-define “above” as “downward facing,” like the Court has already concluded regarding a different claim, it should apply the plain and ordinary meaning of a word unless intrinsic evidence supports something contrary. *See Infection Prevention Techs.*, 2012 WL 3248232, at *20. Therefore, the Court determines it does not need to construe this term or claim.

E. “mounting member . . . at least a portion of the mounting member extending in a direction substantially orthogonal to a longitudinal axis of the first member/mounting member extending outwardly in a direction substantially orthogonal to a longitudinal axis of the channel”

Sansi Construction	LDG Construction
a member separate from the first and second members for mounting the fixture with a major axis apart from and orthogonal to the longitudinal axis of the first member/channel Alternatively, indefinite.	Not indefinite A constituent part of the light fixture having a structural feature for mounting the fixture to another structure.

(Doc. 61-1 at 7.)

This language is from the ’608 and ’923 patents. (Doc. 43-2 at 34–38; Doc. 43-2 at 16–26.) Sansi specifically takes issue with the word “extending” as applied to “mounting member.” (Doc. 46 at 13.) That said, Sansi does not fully explain why “extending” is ambiguous, or how it should be interpreted. In fact, “extend” is an easily understood term, which like other terms in this order need no construction. Because there is little analysis on the term “extend” the Court instead continues the construction analysis based on what

1 constructions the parties have offered in the above chart.

2 It appears that Sansi is asking the Court take terms out of the claim, but these are
 3 terms that have already been defined by the Federal Circuit. *See Siliconix Inc.*, 2004 WL
 4 5645572, at *6 (N.D. Cal. Sept. 10, 2004) (citing *LNP Eng’g Plastics, Inc. v. Miller Waste*
 5 *Mills, Inc.*, 275 F.3d 1347, 1354 (Fed. Cir. 2001) (defining “substantially” as “largely but
 6 not wholly that which is specified.”) If the Court removed “substantially” and adopted
 7 Sansi’s interpretation, it would narrow the claim language to an implied exact 90-degree
 8 (orthogonal) design. This is not what is already included in the patent language, which
 9 based on the Federal Circuit’s definition, does specific work in a patent claim and would
 10 be error to remove. *See Vederi, LLC v. Google, Inc.*, 744 F.3d 1376, 1383 (Fed. Cir. 2014)
 11 (“By effectively reading ‘substantially’ out [of] the claims, the district court erred.”).

12 Further, as LDG notes, it appears Sansi is attempting to construe the claim in a way
 13 beholden to the patent’s example drawing. (Doc 43 at 21–22.) This drawing, however, is
 14 merely an example—it is not all encompassing. The Court should not construe the claims
 15 to match only the example markup. *See Skedco, Inc. v. Strategic Operations, Inc.*, 685 F.
 16 App’x 956, 960 (Fed. Cir. 2017) (“a claim is not limited to inventions looking like those in
 17 the drawings”) (citing *MBO Labs, Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333
 18 (Fed. Cir. 2007)). Because “substantially” has meaning, “extending” is a well-known plain
 19 English word, and the Court is not meant to construe the claims to match an example, the
 20 Court will not construe this term.

21 **F. “Removably coupled**

Sansi Construction	LDG Construction
coupled such that it can be easily decoupled for removal, adjustment and/or replacement	Plain and ordinary meaning (coupled such that it can be removed)

26 (Doc. 61-1 at 10.)

27 This language comes from the ‘700 patent. LDG argues that Sansi’s construction
 28 is inserting “easily” into the patent’s terminology where it otherwise does not exist. In

1 making this argument, LDG relies on the ruling in *Dorel Juvenile Group, Inc. v. Graco*
 2 *Children's Prods., Inc.*, 429 F.3d 1043, 1044–47 (Fed. Cir. 2005). In that case, the claims
 3 used the terms “removably secured” and “removably attached” and the Federal Circuit
 4 affirmed the district court’s order refusing to add the term “easily” to the claims. *Id.* at
 5 1046–47. However, in that case, the district court did recognize that the terms implied that
 6 any detachment would not damage the car seat at issue. *Id.* at 1045.

7 Despite this, Sansi argues that LDG’s construction is too broad because any two
 8 items are removable if one is willing to break them apart. The Court agrees on this point,
 9 but still rejects Sansi’s construction. What does “easily” mean? It means something
 10 different to an end user of the product who purchases it for retail sale, an end user who
 11 uses the product for commercial purposes, and an entirely different thing to the
 12 manufacturer. Inserting “easily” into the claim construction gets us nowhere further than
 13 LDG’s plain and ordinary construction. Therefore, following the court in *Dorel*, the Court
 14 construes “removably coupled” to mean coupled such that it can be removed without doing
 15 damage to the fixture.

16 **G. “a plurality of receiving surfaces, each receiving surface configured to receive at**
 17 **least one LED and wherein the plurality of receiving surfaces provide a plurality**
 18 **of different configuration for a positioning of the plurality of LEDs, each of the**
 19 **plurality of different configuration corresponding to a different optical**
 20 **distribution of the light fixture.”**

Sansi Construction	LDG Construction
requires the ability to use fewer than all receiving surfaces for LEDs on the fixture to change optical distribution of light from fixture	Plain and ordinary meaning

26 (Doc. 61-1 at 20.)

27 This language comes from the ’700 patent. Sansi argues that the specification and
 28 prosecution history support their construction. (Doc. 43 at 12.) Sansi explains that a fixture

1 with only one configuration (i.e. with all receiving surfaces occupied by an LED) adds a
2 limitation that is not in the claim language. (Doc. 43 at 27.)

3 LDG argues that Sansi is attempting to import a negative limitation that doesn't
4 exist in the claim language by restricting "plurality of receiving surfaces" to "fewer than
5 all receiving surfaces." (Doc. 45 at 29.) The language itself—when coupled with language
6 from the specifications—shows that using "fewer than all receiving surfaces" is allowed,
7 but not required. Thus, the Court finds that this phrase needs no construction and should
8 be interpreted by its plain and ordinary meaning.

9 **H. "Substantially frusto-conical shape"**

Sansi Construction	LDG Construction
having the shape of a frustum of a cone, with straight sides (the cross section of which is a frustum of two triangles); does not encompass frusto-spherical shapes.	Having a diameter that increases from a narrow end to a wide end.

15 (Doc. 61-1 at 15.)

16 This language comes from the '700 patent, dependent claim 14. (Doc. 43-2 at 14.)
17 First, Sansi argues that the Court should construe the claim as defined in the chart above
18 (Doc. 43 at 28.), but this appears to be largely based on one of the patent's examples—which
19 serves only as one embodiment not as a binding showing of the patented idea. LDG argues
20 that in addition to attempting to construe this claim purely based on the patent example,
21 Sansi is also inserting terms into the claim which are not and were not intended to be in the
22 patent. (Doc. 45 at 30.) The Court agrees. Neither "straight side" nor "cross-sections" are
23 present in this claim, therefore the Court would be remiss to add them.

24 Second, Sansi's construction removes the term "substantially" from the claim
25 altogether. In offering its construction, "having the shape" removes a margin for difference
26 which "substantially" necessarily adds to the claim. In fact, as explained in a previous
27 claim including the same term "[t]he Federal Circuit has already considered the term
28 'substantially' and has defined it as 'largely but not wholly that which is specified.'"

Siliconix Inc., 2004 WL 5645572, at *6 (quoting *LNP Eng'g Plastics, Inc.*, 275 F.3d at 1354). Substantially is used to avoid mathematical precision in patents. Writing it out of the claim alters that which was drafted in for specific reasons, so again, the Court would be remiss to remove that which the patent contains.

Finally, the Court agrees with LDG that Sansi's injection of a negative limitation ("does not encompass") adds more ambiguity to the claim than it solves. (Doc. 45 at 31.) See, e.g., *Diamond Coating Techs., LLC v. Hyundai Motor Am.*, No. 8:13-cv-01480-MRP (DFMx), 2014 WL 5698445, at *11 (disfavoring "[u]nnecessary language [that] may inject ambiguity in the Court's construction"). By adding this negative limitation, it would require a jury to determine what *was not* covered under the claim rather than determining what is. Therefore, the Court will not construe this claim.

I. "Substantially cylindrical shape"

Sansi Construction	LDG Construction
Having a cylindrical shape with straight parallel sides; does not encompass frustospherical shapes.	Plain and ordinary meaning

This language comes from the '700 patent, dependent claim 15. Sansi argues that the Court should construe the term because the plain and ordinary meaning is in debate. (Doc 43 at 28.) However, like the term analyzed above, Sansi's offered construction removes language from the construction that the patent specifically includes—the word substantially. As LDG points out, Sansi agrees that the term should be construed along its plain and ordinary meaning, but then their offered construction deviates from the plain and ordinary meaning by removing "substantially" from the claim altogether. (Doc. 45 at 32.) And again, Sansi adds a negative limitation ("does not encompass") which adds more ambiguity to the claim. (*Id.*) For the same reasons outlined in the prior section, the Court agrees with LDG and will not construe this language.

J. "Wherein at least one LED and the at least another LED are positioned co-planar to each other"

Sansi Construction	LDG Construction
Indefinite. Alternatively, mounted on the same planar surface	Not indefinite. Plain and ordinary meaning (wherein the at least one LED and the at least one other LED are positioned in the same plane)

(Doc. 61-1 at 17–18.)

This language comes from the '923 patent, dependent claim 2. (Doc. 43-2 at 26.) Here, Sansi takes issue with the term “co-planar.” “Co-planar” is defined as “lying or acting in the same plane.” Merriam-Webster Online, <https://www.merriam-webster.com/dictionary/coplanar> (last visited Jan. 17, 2024). Sansi argues that the term co-planar is meaningless because any two points in the universe are always co-planar. (Doc. 43 at 29.) LDG argues that Sansi is attempting to create a theoretical argument that is disingenuous in context of the claims and specifications at issue here. (Doc. 45 at 33.) The Court agrees with LDG.

This case does not involve any two points in the universe, it involves two LEDs attached to one or more facets around a member, as described in the various patents. This language comes from the '923 Patent at dependent claim 2. (Doc. 43-2 at 26.) LDG argues that the term is not indefinite, and an ordinary person would understand the term when considered in light of Claim 1. (Doc. 43 at 33.) The relevant portion of Claim 1 says that “a plurality of light emitting diodes (LEDs) disposed on the fixture adjacent to the channel, wherein at least one LED is located on one side of the channel and at least another LED is located on an opposite side of the channel.” (Doc. 43-2 at 26.) Alternatively, LDG argues that the dependent claim 2 suggests that the LEDs on opposite sides of the channel are on the same plane and not, as Sansi argues, on the same planar surface. The Court agrees.

Sansi has not shown by clear and convincing evidence that this phrase is indefinite. Therefore, the Court finds that it should be given its plain and ordinary meaning and will not construe the term.

K. “a core region

Sansi Construction	LDG Construction
The region defined by a physical structure within the channel along the longitudinal axis of the channel.	Plain and ordinary meaning

(Doc. 61-1 at 18.)

This language comes from the '923 Patent at dependent claim 5. Sansi asks that the Court impose a physical structure to define the core region. (Doc. 43 at 31.) However, the Court finds nothing in the cited specification language that suggests a physical structure is described or necessary. The core region could be defined by a structure but could simply be a space in the channel. As the Court has found when construing other claims, it will not insert or remove words from the claim language. Here, Sansi is asking the Court to insert “physical structure” into the claim where it is otherwise not there. The Court will again not construe this claim, and instead leave the plain and ordinary meaning of “core region” to the factfinder.

L. “Wherein the plurality of LEDs are asymmetrically disposed about the channel and configured to emit an asymmetric light output”

Sansi Construction	LDG Construction
neither the disposition of LEDs about the channel nor the light output has any identifiable symmetries.	Plain and ordinary meaning

Here, the disputed terms are “asymmetrically” and “asymmetric.” It appears that both sides agree that these terms equate to “not symmetrical.” Despite this, Sansi asks this Court to construe the term. Sansi bases its request on the fact that they disagree with LDG’s infringement contention where they describe asymmetry of light output. Sansi speculates that LDG will argue that asymmetry exists simply because one can locate a single plane of asymmetry even when symmetry exists among other planes. However, the fact that Sansi believes LDG is misapplying the term is not justification for construing a term that needs

no construction. The jury would be the ultimate decider on what is asymmetric as understood by its plain and ordinary meaning. Therefore, the Court will not construe this claim, and will leave its plain and ordinary meaning before the jury.

M. “Transfer..heat...by convection”

Sansi Construction	LDG Construction
<p>Requires the fixture to be installed and operating to be met, and the ability to uniquely identify that heat is dissipating by convection.</p> <p>Alternatively, indefinite.</p>	<p>Term “convection” in claim 20 of the ’923 patent and claim 18 of the ’608 patent is a typographical error and should be corrected to “conduction.”</p> <p>The first and second LEDs are in thermal communication with the member and configured to transfer heat to the member by conduction.</p>

This language comes from the ’923 patent, dependent claim 20 and the ’608 patent dependent claim 18. (Doc. 43-2 at 26, 38.) LDG is seeking judicial correction of the claim language of the claim portions that say “by conduction” instead of “by convection.” (Doc. 45 at 36.) Judicial correction to patent language is appropriate where “(1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *Pavo Sols. LLC v. Kingston Tech. Co., Inc.*, 35 F.4th 1367, 1373 (Fed. Cir. 2022). LDG contends that both these prongs are met here, and the Court should correct and construe this language to be “transfer heat by conduction” rather than convection. (Doc. 45 at 36.) Alternatively, Sansi argues that judicial correction is not warranted because the language is not ambiguous and should be construed as written. (Doc. 43 at 34.) Because Sansi argues that the language should be applied as written, it does not present arguments on what the prosecution suggests about the language. (*Id.*)

As to prong one, the Court agrees with LDG that the claim language and specification support correction. Here, the first prong is met, as all other patent claims

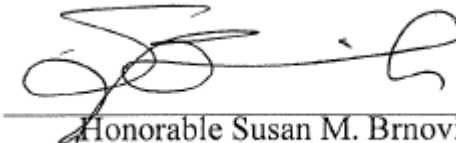
1 require heat be transferred by conduction, not convection. Additionally, the specification
2 supports correction as it also only includes “conduction” in its terminology when
3 discussing how heat is transferred under the patent. When reviewing the patents in
4 conjunction, it appears to the Court that if it construed the language as written it would
5 require the LEDs to be *operating*, rather than just be *present*, to infringe. In the scheme of
6 how the language throughout the patents appears, this does not seem to be reasonable.

7 As to prong two, the Court also agrees with LDG that there is no prosecution
8 evidence pointing to the contrary. Further, Sansi also does not provide this evidence.
9 Therefore, the Court will correct this claim language as offered by LDG.

10 **IV. CONCLUSION**

11 **IT IS ORDERED** constructing the claims as decided above.

12 Dated this 17th day of January, 2024.

13
14
15 
16 Honorable Susan M. Brnovich
17 United States District Judge
18
19
20
21
22
23
24
25
26
27
28